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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,459	11/14/2001	Tarou Kaneko	NEC01P205-HIa	6999

7590 05/17/2004
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EXAMINER

WONG, ERIC K

ART UNIT	PAPER NUMBER
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2874

DATE MAILED: 05/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/987,459

Applicant(s)

KANEKO, TAROU

Examiner

Eric Wong

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-8, 10, 12, 16, 31-34, 36, 38, 40 and 42 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-8, 12, 16, 31-34, 38 and 42 is/are allowed.
- 6) ☒ Claim(s) 10, 36 and 40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 0404.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Prosecution Application

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 4/8/04 has been entered.

Response to Arguments

2. Applicant's arguments filed 2/10/04 with regards to claims 10, and 40 have been fully considered but they are not persuasive. Applicant argues that Lin fails to teach a means for attenuation as claimed. Lin teaches the use of tuning ports to tune a signal from an input to an output end. Lin discloses the means to adjust the center wavelength of a waveguide device. This method of fine tuning can be considered a means of attenuation since the signals are being fine tuned to a desired output.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States;

4. Claims 10 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by United States Patent Number 6,181,849 to Lin et al.

Lin discloses in figures 7A-7C, an arrayed waveguide grating comprising:

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- One or plural input and output waveguides for inputting signal lights;
- A plurality of input and output waveguides for outputting signal lights;
- A channel waveguide array having waveguides which are successively longer with predetermined waveguide length differences (67);
- An input slab waveguide connecting an input end of said channel waveguide array to said input waveguides; and
- An input and output slab waveguide (65) connecting an input end of said channel waveguide array to said output waveguides and having optical input/output characteristics set to predetermined ratios for the respective output waveguides with respect to said input waveguides (Column 6, Lines 48-53).
- The waveguides have central positions displaced from corresponding focused positions in a direction perpendicular to central axes of the input waveguides (Figure 7A).

5. Claims 10, 36 and 40 are rejected under 35 U.S.C. 102(b) as being anticipated by Japanese Patent Publication 10-197735 to Katsunari et al (newly cited).

In the abstract and figure of the abstract, Katsunari et al. teaches attenuation of a signal in an arrayed waveguide grating comprising:

A channel waveguide array including a plurality of waveguides, each successive waveguide of said plurality of waveguides being longer by a predetermined waveguide length difference (5, Figure 1)

An input slab waveguide including an output end connected to an input end of said channel waveguide array (2, Figure 1)

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At least one output waveguide for outputting signal lights (3, Figure 1)

An output slab waveguide connecting an output end of said channel waveguide array to said at least one output waveguide (4, figure 1)

A plurality of input waveguides connected to a surface of an input end of said input slab waveguide,

Wherein the central axes of selected input waveguides are displaced along a direction perpendicular to central axes of said input waveguides from corresponding focusing positions by predetermined values to attenuate said signal lights propagated through said selected input waveguides to said at least one output waveguide (Figure 6)

Allowable Subject Matter

6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art made of record fails to explicitly disclose the central axes of selected input waveguides inclined from a perpendicular to said surface at a focusing position to attenuate a signal. Therefore, claims 12 and 38 are allowed.

7. The prior art also fails to explicitly disclose an input end that partially projects towards ends of selected input waveguides from a cophasal plane of corresponding focusing positions. Therefore claims 16 and 42 are allowed.

8. Claims 5-8, and 31-34 are allowed for reasons stated in the prior office action.

Information Disclosure Statement

9. The information disclosure statement (IDS) submitted on 4/8/04 is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

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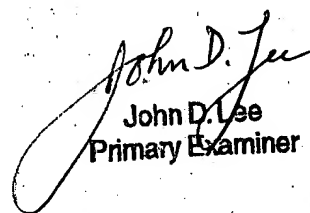
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Wong whose telephone number is 571-272-2363. The examiner can normally be reached on Monday through Friday, 830AM - 430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

EW


John D. Lee
Primary Examiner